

IN THE CLAIMS

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please **ADD** new claims 23 and 24 as follows.

Please **AMEND** claims 1-3, 5-18.

- 5010 B' A1
1. (CURRENTLY AMENDED) A method ~~for~~of transferring packets between a plurality of nodes including a first node, a second node, and a third node connected ~~to one another~~ by a bus but not connected in a ring form, the method comprising the steps of:
 - (a) transferring a write packet from the first node to the second node;
 - (b) storing data addressed to the third node in the write packet at the second node; and
 - (c) transferring the write packet from the second node to the third node.
 2. (CURRENTLY AMENDED) The packet transfer method according to claim 1, wherein the write packet ~~includes~~comprises a blank data portion for storing the data, ~~and wherein the data portion is blank.~~
 3. (CURRENTLY AMENDED) The packet transfer method according to claim 1, wherein the first node has information indicating that a plurality of the second nodes substantially simultaneously transfer packets to a plurality of the third nodes, and ~~wherein the write packet transfer step (a) includes the write packet transferring~~ comprises transferring the plurality of write packet packets to the plurality of the second nodes based on the information.
 4. (ORIGINAL) The packet transfer method according to claim 1, wherein the write packet includes a header portion and a data portion, and wherein the data portion stores identification information indicating whether the data portion is blank.
 5. (CURRENTLY AMENDED) The packet transfer method according to claim 1, wherein the write packet transfer ~~step (a) includes~~ transferring comprises transferring a guide packet to the second node storing guide information indicating ~~the~~a state of the write packet,

before the first node transfers the write packet, and wherein the data storing ~~step (b)~~ includes comprises writing the guide information to the guide packet to indicate that the data has been written to the write packet.

6. (CURRENTLY AMENDED) The packet transfer method according to claim 1, further comprising ~~the steps of:~~

(d) transferring a data packet from the first node to the second node;
 (e) processing the data stored in the data packet at the second node; and
 (f) transferring the data packet including the processed data to the third node, wherein the write packet transfer ~~step (a)~~ transferring is performed after the data packet transfer ~~step (d)~~ transferring.

7. (CURRENTLY AMENDED) The packet transfer method according to claim 1, wherein the write packet transfer ~~step includes~~ transferring comprises transferring the write packet from the first node to the second node at predetermined time periods.

8. (CURRENTLY AMENDED) The packet transfer method according to claim 1, further comprising ~~the step of~~ padding the data stored in the write packet so that ~~the amount of~~ the data amount is substantially ~~the same~~ as the data storage capacity of the write packet.

9. (CURRENTLY AMENDED) A method ~~for~~ of transferring packets between a plurality of connected nodes including a first node, a second node, and a third node, the first node, the second node, and the third node not connected in a ring form, the method comprising ~~the steps of:~~

transferring a first packet storing first data from the first node to the second node;
 processing the first data stored in the first packet and temporarily storing the processed first data at the second node;
 transferring a second packet storing second data from the first node to the second node;
 rewriting the second data stored in the second packet ~~to~~ with the processed and temporarily stored first data at the second node; and
 transferring the second packet storing including the processed first data to the third node.

10. (CURRENTLY AMENDED) A packet transfer control circuit incorporated in a

first node to transfer a packet to a second node, connected to the first node, wherein the packet includes a data portion for storing data, the control circuit comprising:

an identification circuit ~~for~~ identifying whether the data portion of the packet is blank; and
a processor connected to the identification circuit ~~for~~ and writing data to the data portion of the packet when the data portion of the packet is blank and transferring the packet to a third node, wherein the first node, the second node, and the third node are not connected in a ring form.

11. (CURRENTLY AMENDED) The packet transfer control circuit according to claim 10, wherein the processor pads the data stored in the packet until ~~the amount of the data~~ amount is substantially the same as the data storage capacity of the data portion.

12. (CURRENTLY AMENDED) A packet transfer control circuit incorporated in a first node to transfer a packet to a second node and a third node, ~~which are connected to the first node~~ the first node, the second node, and the third node connected in a ring form, wherein the packet includes a data portion for storing data, and wherein the second node is downstream from the first node and the third node is upstream from the first node, the control circuit comprising:

a processor ~~for~~ retaining data addressed to the third node and rewriting the data stored in the data portion of the packet, which is received by the first node from the second node, with the retained data addressed to the third node, when the stored data is addressed to the third node.

13. (CURRENTLY AMENDED) A packet transfer control circuit incorporated in a first node to transfer a plurality of packets to a second node and a third node, ~~which are connected to the first node~~ the first node, the second node, and the third node not connected in a ring form, wherein each ~~of the packets~~ packet includes a data portion for storing data, the control circuit comprising:

a processor ~~for~~ transferring a plurality of write packet ~~packets~~, the data portion of which is blank, to each of the second and third nodes so that the second and third nodes substantially simultaneously store data in the data portion of the write packet packets received from the first node.

14. (CURRENTLY AMENDED) The control circuit according to claim 13, wherein

~~the~~each write packet further ~~includes~~include an identifier for storing information indicating whether the data portion of each write packet is blank.

15. (CURRENTLY AMENDED) The control circuit according to claim 13, wherein the processor transfers a plurality of guide packetpackets storing guide information indicating a state of the write ~~packetpackets~~ before transferring the write ~~packetpackets~~ from the first node, and wherein the guide information written to the guide ~~packetpackets~~ indicates that data has been written to the write ~~packetpackets~~ when the ~~second node stores~~second and third nodes store the data in the data portion of the received write packets.

16. (CURRENTLY AMENDED) A packet transfer control circuit incorporated in a first node to transfer packets to a plurality of second nodes, ~~which are connected to the first node~~the first node and the plurality of second nodes not connected in a ring form, wherein each of the ~~packets~~packet includes a data portion for storing data, the control circuit comprising:
a processor ~~for transferring to the~~each second ~~nodes~~node a write packet, the data portion of which stores data, and then a further write packet, the data portion of which is blank, wherein each of the ~~second nodes~~node stores data in the blank data portion.

17. (CURRENTLY AMENDED) The control circuit according to claim 16, wherein the write packet further includes an identifier for storing information indicating whether the data portion is blank.

18. (CURRENTLY AMENDED) The control circuit according to claim 16, wherein the processor transfers a guide packet storing guide information indicating ~~the~~a state of the write packet before transferring the write packet from the first node, and wherein the guide information written to the guide packet indicates whether data has been written to the write packet when each of the second nodes stores the data in the blank data portion of the write packet.

19. (ORIGINAL) A packet transfer control circuit of a first network node, comprising
an input interface circuit for receiving a packet from a second network node connected to the first network node, the received packet being one of a normal packet type and a write packet type, and the received packet comprising at least a header portion and a data portion;
an input link layer processing circuit, connected to the input interface circuit, for

receiving the received packet therefrom, reading the header portion of the packet to determine the packet type, and if the received packet is a normal packet, also determining an addressee of the packet;

an identification circuit, connected to the input link layer processing circuit, for receiving a write packet type of packet from the input link layer processing circuit, checking an identifier of the data portion of the write packet to determine whether the data portion of the write packet is blank and to determine an addressee of the write packet, wherein the identification circuit generates a control signal if the data portion is blank;

a processor, connected to the identification circuit and the input link layer processing circuit, wherein the input link layer processing circuit passes the received packet directly to the processor if the received packet is addressed to the first node and is a normal type packet, wherein the processor receives the packet data from the identification circuit if the packet is a write type packet, and wherein the processor receives the control signal from the identification circuit and pads the data portion of the packet in order to fill the data portion of the packet when the control signal indicates that the data portion is blank;

a memory, connected to the processor, for storing the packet data processed by the processor;

an output link layer processing circuit, connected to the processor and to the input link layer processing circuit, for receiving the packet therefrom and preparing a transmission packet from the packet, wherein the input link layer processing circuit passes a normal type packet not addressed to the first node directly to the output link layer processing circuit; and

an output interface circuit, connected to the output link layer processing circuit, for receiving the transmission packet therefrom and transmitting the transmission packet over a bus to another node.

20. (ORIGINAL) The packet transfer control circuit of claim 19, wherein the packets are transferred between nodes over an IEEE 1394 compatible bus.

21. (ORIGINAL) The packet transfer control circuit of claim 19, further comprising:
an input physical layer processing circuit, connected between the input link layer processing circuit and the input interface circuit, for receiving the packets from the input interface circuit and transferring them to the input link layer processing circuit.

22. (ORIGINAL) The packet transfer control circuit of claim 21, further comprising:

an output physical layer processing circuit connected between the output link layer processing circuit and the output interface circuit, for transferring the transmission packet from the output link layer processing circuit to the output interface circuit.

23. (NEW) A method of transferring packets between a plurality of nodes connected in a star form, the plurality of nodes including a first node, a second node, and a third node, the method comprising:

transferring a write packet from the first node to the second node;
storing data addressed to the third node in the write packet at the second node; and
transferring the write packet from the second node to the third node.

24. (NEW) A packet transfer control device incorporated in a first node to transfer a packet to a second node and a third node, the first node, the second node and the third node connected in a star form, the packet including a data portion for storing data, the device comprising:

an identification circuit identifying whether the data portion is blank; and
a processor connected to the identification circuit for writing data to the data portion of the packet when the data portion of the packet is blank and transferring the packet to the third node.